SIEMENS

PATENT Attorney Docket No. 2003P04918US01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Title	METHODS AND SYSTEMS FOR PROVIDING BANDWIDTH ON DEMAND IN COMMUNICATION SYSTEMS			
Filed:	September 26, 2003)	Conf: No.:	9712	
Serial No.:	10/672,771	Examiner:	B. Wong	
Inventor:	S. Wang et al.	Group Art Unit:	2619	

Commissioner For Patents

P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

APPELANTS BRIEF

This Appeal Brief relates to an appeal from the rejection of claims 1-7, and 10-22 in the Office Action mailed February 01, 2008.

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I. Real Party in Interest

The real party in interest is Siemens Aktiengesellschaft of Munich, Germany, the assignee of record.

II. Related Appeals and Interferences

There are no known related appeals or interferences.

III. Status of Claims

Claims 8 and 9 are canceled. Claims 1-7 and 10-22 are rejected. No claims have been allowed; however, the Examiner has indicated that claims 10, 11-15, 16, and 20-22 would be allowable if the Section 112 rejection is overcome. Claims 1, 5, 10, and 16-18 are being appealed.

IV. Status of Amendments

No amendment has been filed subsequent to the rejection.

Aspects of the invention are related to a data processing system with services for

providing functionalities.

A. Claim 1

Referring to Figures 1, 2A and 2B and SUMMARY OF INVENTION as amended in

January 14, 2008 response. independent claim 1 recites a method of providing bandwidth on

demand in a broadband communications system, comprising:

establishing a default connection between a subscriber data processing system 105 and a

content-provider data processing system, said default connection comprising an asynchronous

transfer mode (ATM) permanent virtual circuit (PVC);

initiating a bandwidth-on-demand session 212-244 via a subscriber, said bandwidth-on-

demand session creates one or more switched virtual circuits (SVCs) between said subscriber

data processing system 105 and said content-provider data processing system to supplement the

bandwidth of said default connection (see e.g., page 8 lines 16-21); and

ending said bandwidth-on-demand session 250-270 by terminating said one or more

SVCs (see e.g., page 10 lines 15-20).

B. Claim 5

Referring to Figure 2B page 10 line 21- page 11 line 4, dependent claim 5 recites wherein

said step of ending said bandwidth-on-demand session comprises sending a message 250 from

said subscriber data processing system 105 to a proxy signaling server 140 comprising an

instruction to end said bandwidth-on-demand session and, in response to said message 252,

sending a message from said proxy signaling server 140 150 to an ATM edge device 120 to

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terminate said one or more SVCs between said subscriber data processing system 105 and said content-provider data processing system.

C. Claim 10

Referring to Figures 1 and 2A and SUMMARY OF INVENTION, independent claim 10 recites a broadband communication system 110 for providing bandwidth-on-demand, comprising:

a subscriber data-processing system 105 for providing a subscriber with access to said communication system 110;

a digital subscriber line (DSL) modem 110 for modulating and demodulating data for transmission over a local loop telephone line to a DSL multiplexer (DSLAM) 115 (see e.g, page 4 line 22 – page 5 line 2);

an asynchronous transfer mode (ATM) edge device 120 in communication with said DSLAM 115 for receiving data from and transmitting data over an ATM network 135 (see e.g., page 5 lines 10-12);

a proxy signaling server 140 in communication with said subscriber data processing system 105 (see e.g., page 18-20);

a content-provider data processing system in communication with said ATM network 135 for providing broadband content to a subscriber;

a client-side application on said subscriber data processing system 105 for use by said subscriber (see e.g., 4 lines 5-6):

to login 202 to said proxy signaling server 140 (see e.g. page 8 lines 1-3),

to receive service advertising information 204, 206 due to said login (see e.g., page 8 lines 5-9),

to request a bandwidth-on-demand session 212-244 after said receive (see e.g., page 8 lines 16-21), and

for transmitting information 212 to said proxy signaling server 140 in response to said request (see e.g., page 8 line 22- page 9 line 8); and

a connection-management application on said proxy signaling server 140 for:

providing service advertising information 204, 206 to said client-side application due to said login (see.e.g, page 8 lines 5-9), and

receiving said information and for signaling 214 to said ATM edge device 120 on behalf of said CPE 110 to establish one or more switched virtual circuits (SVCs) from said CPE 110 to said content-provider data processing system (see e.g., page 9 lines 11-14).

D. Claim 16

Referring to Figures 1, 2A and 2B and SUMMARY OF INVENTION, independent claim 16 recites a communications system, comprising:

a subscriber data processing system 105 for use by a subscriber to transmit and receive data to and from a remote content-provider data processing system;

client premise equipment (CPE) 110 in communication with said subscriber data processing system 105 for transmitting and receiving said data over a local loop to a DSL multiplexer (DSLAM) 115 (see e.g., page 4 line 22-page 5 line 2).;

an asynchronous transfer mode (ATM) edge device 120 in communication with said DSLAM for transmitting and receiving said information over an ATM network 135 (see e.g., page 5 lines 10-12);

a proxy signaling server 140 in communication with said subscriber data processing system 105 and said ATM edge device 120 (see e.g., page 5 line 18-page 6 line 4);

means in said subscriber data processing system 105, responsive to said subscriber, for sending a request to said proxy signaling sever to login to said proxy signaling server 140, to receive service advertising information from said proxy signaling server 140 due to said login, initiate a bandwidth-on-demand session after said receive, terminate an said bandwidth-on-demand session, and logoff from said proxy signaling server 140 after said termination (see e.g., page 4 lines 5-21); and

means in said proxy signaling server 140, responsive to said requests, wherein said initiating said bandwidth-on-demand session creates one or more Switched Virtual Circuits (SVCs) between said subscriber data processing system 105 and said content-provider data processing system (see e.g., page 5, line 18-page 6 line 11).

E. Claim 17

Referring to Figures 1 and 2A and SUMMARY OF INVENTION, dependent claim 17 recites further comprising:

logging 202 onto to a proxy signaling server 140 via a subscriber of said subscriber data processing system 105 (see e.g., page 8 lines 1-3); and

providing service advertising information 204, 206 to said subscriber from the proxy signaling server 140 in response to a successful login (see e.g., page 8 lines 5-9),

wherein initiating said bandwidth-on-demand session 212-244 is after said providing of said service advertising information 204, 206 (see e.g., page 8 lines 16-21).

F. <u>Claim 18</u>

Referring to Figures 1 and 2A and page 10 lines 5-7, dependent claim 17 recites further comprising updating a route table of said subscriber data processing system 105 via the proxy signaling server 140 in response to said creation of said one or more SVCs and in order to route traffic over the newly created said one or more SVC.

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VI. Grounds for Rejection to be Reviewed

The following grounds of rejection are requested to be reviewed on appeal:

the rejection of claim 1-7, 10-17, 18, an 20-22 under 35 U.S.C. 112,

the rejection of claim 1 under 35 U.S.C. § 103(a) as being obvious over LaCost et al. (USPN 6,453,317) in view of Sreedharan et al. (USPN 2002/0057700), and

the rejection of claim 5 under 35 U.S.C. § 103(a) as being obvious over LaCost et al. in view of Sreedharan in view of Cunetto et al. (US PGPub 2002/0024954).

VII. Appellants' Argument

A. The rejection of claim 1-7, 10-17, 18, and 20-22 under 35 U.S.C. 112

The Examiner has indicated that claims 10, 11-15, 16, and 20-22 would be allowable if the Section 112 rejection is overcome. Applicants respectfully submit that claims 17-19 would also be allowable if the Section 112 rejection is overcome since there is no other outstanding rejection to these claims.

a) Independent claim 1

Applicants' claim 1 recites:

initiating a bandwidth-on-demand session via a subscriber, said bandwidth-on-demand session creates one or more switched virtual circuits (SVCs) between said subscriber data processing system and said content-provider data processing system to supplement the bandwidth of said default connection

The Examiner states that the "Specification discloses dynamic VCs but not SVCs. That is, SVCs are dynamic VCs because SVCs is established only when data must be transferred across a network, but dynamic VCs are not necessary SVCs". Applicants respectfully submit the sufficient support may be found, for example, on page 10 lines 3-4 which states "a dynamic VC, such as an SVC, has been established between the CPE 110 and the BRAS 125". Furthermore, the following was provided by the Applicants in the Office Action Response on January 14, 2008 as a response to the Examiner's arguments.

Amendments to the Specification

...

Support for following amendment to the Specification may be found, for example, in original claim 1. Please insert the following paragraph on page 1 between paragraphs 6 and 7, as follows:

In another aspect, an initiation of a bandwidth-on-demand session creates one or more switched virtual circuits (SVCs) between the subscriber data processing system and the content-provider data processing system to supplement the bandwidth of the default connection, and the ending of the bandwidth-on-demand session is by terminating the one or more SVCs.

Applicants have amended the SUMMARY OF THE INVENTION section to include the description of Switched Virtual Circuits

(SVC) as provided by original claim 1. Applicants respectfully disagree that this amendment is necessary, since as the Examiner has pointed out, an SVC is a type of dynamic virtual circuit (VC). However, to further prosecution of the Application Applicants have made said amendment.

Thus, the Specification provides sufficient support for an SVC. In response to Applicants amendments, the Examiner further states that Applicant fails to address the difference where the usage of SVCs in the claim language and dynamic VCs in the Specification. Applicants respectfully submit that this has been addressed by providing the specific references in the Specification. Furthermore, it is improper to import claim limitations from the specification (2111.01).

The Examiner has further rejected claim 1, stating "it is unclear what is meant by 'via said subscriber' or whether Applicant means initiating a bandwidth-on-demand session by a subscriber...Specification discloses a subscriber actively initiating a bandwidth-on-demand session whereas 'initiating a bandwidth-on-demand session [by way of] a subscriber' does not necessary mean that a subscriber is actively taking part. A subscriber can be a widget used to initiate a BoD session".

Applicants respectfully disagree and submit that the subscriber is active in the initiation. Furthermore, some latitude in the manner of expression and the aptness of terms should be permitted even though the claim language is not a precise as the examiner might desire. (2173.02).

b) Independent claim 10

Applicants' claim 10 recites:

a client-side application on said subscriber data processing system for use by said subscriber: ...to receive service advertising information due to said login, to request a bandwidth-on-demand session after said receive, and for transmitting information to said proxy signaling server in response to said request

The Examiner states that the Specification does not disclose "after said receive" and "in response to said request". Applicants respectfully submit that page 8 paragraphs 1-2 and FIG 2A shows a Subscriber Login/Service Advertising section and a BOD Session Creation section, which occurs after the Subscriber Login/Service Advertising section. The Subscriber 2003P04918US01 Appeal Brief JDH.rtf

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Login/Service Advertising section includes the Login request from the subscriber 202, the acknowledgment of the Login request to the subscriber 204, and a NetServicesCfm message from the subscriber 210. The Subscriber Login/Service Advertising section may also include a ServiceAdvertisement message to the subscriber 206.

Applicants respectfully that "Definiteness of claim language must be analyzed, not in vacuum, but in light of: (A) The content of the particular application disclosure; (B) The teachings of the prior art; and (C) The claim interpretation that would be given by one processing the ordinary level of skill in the pertinent art at the time the invention was made" (MPEP 2173.02). Furthermore, the following was provided by the Applicants in the Office Action Response on January 14, 2008 as a response to the Examiner's arguments.

MPEP 706.03(c) recites:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The BOD Session Creation section clearly occurs after the Subscriber Login/Service Advertising section. It would be clear to one skilled in the art that the request a bandwidth-on-demand session which is part of the BOD Session Creation, is clearly after receiving the service advertising information.

The Examiner further contends that the "Specification does not disclose ... 'in response to said request". Applicants respectfully submit that one skilled in the art would recognize that the request of the extra bandwidth was in order to transmit information. Furthermore, page 10, line 5 of the Specification recites: Following the establishment of the dynamic VC, the proxy server 140 updates the subscriber's route table to route traffic over the newly created dynamic VC.

One skilled in the art would recognize that transmitting information is a routing of traffic. Additionally the bandwidth-on-demand request causes the creation of the dynamic virtual circuit. Thus, the request of bandwidth-on-demand must be done prior to the transmission of information. Moreover, to further prosecution, Applicants have amended the Specification to include the original

language included in claim 10 which provides sufficient support for "in response to said request".

Additionally, the Examiner contends that the "Specification does not disclose 'providing service advertising information to said client-side application due to said login" Applicants respectfully submit that page 8 paragraph 1 recites

If login is possible, the proxy server 140 responds to the LoginReq message with a LoginReqAck message (step 204) containing information such as the name of available broadband services (step 206). Such information may also be sent to the subscriber in a separate Service Advertising message. After the subscriber receives the list of available serves, the data processing system 105 sends a Service AdvertisingCfm message to the proxy server 140 to acknowledge receipt of the Service Advertise message (step 208). After the list of services has been displayed to the subscriber, a NetServicesCfm message is sent to the proxy server as confirmation (step 210), which completes the Subscriber Login/Service Advertising phase.

Thus, service advertising information is sent in the LoginReqAck or in the Service Advertising message. Both the LoginReqAck and the Service Advertising message are sent in response to Login message. Therefore, providing service advertising information to said client-side application due to said login is supported in the Specification

In response the Examiner has stated "Applicants's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references". To this point, Applicants have properly responded to the 35 U.S.C. 112 rejection and that improper for the Examiner to require Applicants to distinguish the claims from the references in a response to a 35 U.S.C. 112 rejection. Furthermore, Applicants respectfully submit that in view of the above, sufficient support for claim 10 is found in the Specification.

c) Independent claim 16

The Examiner states that the specification does not disclose "after said receive". Applicants respectfully submit that for at least the reasons discussed in connection with the "after

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said receive" rejection in Claim 10, and that in view of the above, sufficient support for claim 16 is found in the specification.

d) Independent claim 17

The Examiner states that the specification does not disclose "in response to said providing of said service advertising information". Applicants respectfully submit that for at least the reasons discussed in connection with the "in response to said request" rejection in Claim 10, Furthermore, Applicants respectfully submit that in view of the above, sufficient support for claim 17 is found in the specification.

e) Independent claim 18

Applicants' claim 18 recites:

further comprising updating a route table of said subscriber data processing system <u>via</u> the proxy signaling server in response to said creation of said one or more SVCs and in order to route traffic over the newly created said one or more SVCs..

In the Office Action dated November 15, 2007 the Examiner contends that the "nowhere in the Specification discloses a step of 'updating a route table'". Applicants respectfully submit that page 10 lines 5-7 of the Specification recites:

Following the establishment of the dynamic VC, the proxy server 140 <u>updates the subscriber's route table</u> to route traffic over the newly created dynamic VC.

Thus, updating a route table is supported by the Specification. In response, the Examiner states "However, Examiner respectfully disagrees. ... 1) the Specification discloses the proxy signaling server updating the route table whereas it is not necessary that the proxy signaling server updates the route table in the claim language... That is, although 'via' means 'by way of...the work 'via' does not actively indicate who is "updating a route table; and .2) the Specification discloses on newly created dynamic VC whereas the claim language uses one or more SVCs".

Applicants respectfully submit that the term "via" sufficiently shows that the proxy signaling server is involved in the update of the route table. Furthermore, it is improper to import

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claim limitations from the specification (MPEP 2111.01). Thus, there is no requirement that the Applicants provide "who" updates the table and thus via is sufficient.

Moreover, Applicants respectfully submit that page 2 line 17 states "initiating and terminating one or ore dynamic virtual circuits". Thus, more than one SVC may be created. Applicants respectfully submit that in view of the above, sufficient support for the claim 18 is found in the specification.

B. The rejection of claim 1 under 35 U.S.C. 103 as being obvious over LaCost et al. (USPN 6,453,317) in view of Sreedharan et al. (US PGPub 2002/0057700)

Applicants' Claim 1, recites:

establishing a default connection ...said default connection comprising an asynchronous transfer mode (ATM) permanent virtual circuit; initiating a bandwidth-on-demand session ...said bandwidth-on-demand session creates one or more switched virtual circuits (SVCs) between said subscriber data processing system and said content-provider data processing system to supplement the bandwidth of said default connection

The Examiner states that LaCost teaches "establishing a default connection (a dedicated connection, col. 6 line 5)" and teaches "initiating a bandwidth-on-demand session (to add a single route)". Thus, appears the Examiner equates LaCosts' dedicated connection to Applicants' default connection and LaCosts 'to add a single route' to Applicants "initiating a bandwidth-on-demand.

Applicants respectfully submit that Applicants default connection comprises an asynchronous transfer mode (<u>ATM</u>) permanent virtual circuit. ATM (Asynchronous Transfer Mode) is a cell relay. In contrast, LaCost teaches a frame relay. One skilled in the art would understand that a frame relay cannot reasonably be considered a cell relay. Furthermore LaCost recites on col. 5 line 66- col. 6 line 21.

Alternatively, a hyperstream frame relay (HSFR) connection may be used to establish a communications link between customer facilities and servers 102, 104 and 106 respectively. There are several key benefits that make this type of connection preferable over dial-up and Internet connections as discussed above. For example, a frame relay connection is a dedicated connection with guaranteed bandwidth. This insures that customers may access the information faster and allow developers of web sites, for example, to build content with graphics-intensive tools/pages. The circuit

speeds can range from 56 kilobits (DS0) to 1.54 megabits (T1) based upon customer needs. A customer would have to add a single route to a service facility to their existing network routers to support hyperstream frame relay facilities. With such high-speed frame relay connections, a customer's data is only transmitted back to them and not via any other network connection which may be accessed by third parties such as those engaged in fraudulent review of network traffic. This version of connectivity can add value to a service by providing dedicated access. The customer, however, would purchase an additional permanent virtual circuit from a service provider for dedicated bandwidth or BOD (bandwidth on demand) requirements.

LaCost's addition of a <u>single route</u> is to <u>support the dedicated connection</u> and not a reference to another connection. Therefore, LaCost addition of a single route does not teach or suggest initiating a bandwidth-on-demand session but simply a support of the frame relay facilities that provide the dedicate connection.

Furthermore, LaCost teaches an additional <u>dedicated connection</u> would be required to provide extra bandwidth. Based on the Examiners equating LaCosts' dedicated connection to Applicants' default connection, Applicants respectfully submit that an additional dedicated connection would merely be an additional default connection., which is always on (see e.g., page 6 lines 14-16). In contrast Applicants SVC is created on demand. A PVC cannot reasonably be considered as an SVC. Thus, LaCost not only does not teach the respective limitation, <u>LaCost teaches away</u> from the bandwidth-on-demand session creating a new connection via a switch virtual circuit.

Moreover, Applicants default connection comprises an asynchronous transfer mode (ATM) permanent virtual circuit. ATM (Asynchronous Transfer Mode) is a cell relay. In contrast, LaCost teaches a frame relay. One skilled in the art would understand that a frame relay cannot reasonably be considered a cell relay

The following is a quotation from MPEP 2143:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to <u>modify the reference</u> or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference

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(or references when combined) must teach or suggest all the claim limitations.

C. The rejection of claim 5 under 35 U.S.C. 103 as being obvious over LaCost in view of Sreedharan and Cunetto et al. (US PGPub 2002/0024954)

Applicants' Claim 5, recites:

said step of ending said bandwidth-on-demand session comprises sending a message from said subscriber data processing system to a proxy signaling server comprising an instruction to end said bandwidth-on-demand session and, in response to said message, sending a message from said proxy signaling server to an ATM edge device to terminate said one or more SVCs between said subscriber data processing system and said content-provider data processing system.

The Examiner states "it would have been obvious to a person of ordinary skill in the art to reverse the initiating step in claim 2 to provide for the ending step in claim 5. The suggestion/motivation for doing so would have been to complete call control for ATM SVC signaling. Therefore, it would have been obvious to combine an ending step ..."

Applicants respectfully submit that there is no motivation to provide an ending step for an ATM <u>SVC</u> to LaCost teaching of a PVC. Unlike an SVC, a PVC is not torn down after transmission is complete but is permanently connected (see e.g., page 6 lines 14-16).

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VIII. Conclusion

For the foregoing reasons, it is respectfully submitted that the rejections set forth in the outstanding Office Action are inapplicable to the present claims. The honorable Board is therefore respectfully requested to reverse the rejection of the Examiner and to remand the application to the Examiner with instructions to allow the pending claims. Please grant any extensions of time required to enter this paper. Please charge any appropriate fees due in connection with this paper or credit any overpayments to Deposit Acct. No. 19-2179.

Respectfully submitted,

Dated: <u>AUS 28, 2008</u>

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IX. Claims Appendix

1. (previously presented) A method of providing bandwidth on demand in a broadband

communications system, comprising:

establishing a default connection between a subscriber data processing system and a

content-provider data processing system, said default connection comprising an asynchronous

transfer mode (ATM) permanent virtual circuit (PVC);

initiating a bandwidth-on-demand session via a subscriber, said bandwidth-on-demand

session creates one or more switched virtual circuits (SVCs) between said subscriber data

processing system and said content-provider data processing system to supplement the

bandwidth of said default connection; and

ending said bandwidth-on-demand session by terminating said one or more SVCs.

2. (original) The method of claim 1 wherein said step of initiating a bandwidth-on-

demand session comprises sending a message from said subscriber data processing system to a

proxy signaling server comprising information related to said bandwidth-on-demand session and,

in response to said message, sending a message from said proxy signaling server to an ATM

edge device to create one or more SVCs between said subscriber data processing system and said

content-provider data processing system.

3. (original) The method of claim 2 wherein said information comprises data for

authenticating said subscriber.

4. (original) The method of claim 2 wherein said message from said proxy signaling server comprises User Network Interface (UNI) signals.

5. (original) The method of claim 2 wherein said step of ending said bandwidth-on-demand session comprises sending a message from said subscriber data processing system to a proxy signaling server comprising an instruction to end said bandwidth-on-demand session and, in response to said message, sending a message from said proxy signaling server to an ATM edge device to terminate said one or more SVCs between said subscriber data processing system and said content-provider data processing system.

6. (original) The method of claim 2 wherein said ATM edge device comprises an ATM switch.

7. (previously presented) The method of claim 6 wherein said step of initiating a bandwidth-on-demand session comprises said subscriber using a client-side application on said subscriber data processing system to request said bandwidth-on-demand session.

- 8. (canceled)
- 9. (canceled)
- 10. (previously presented) A broadband communication system for providing bandwidth-on-demand, comprising:

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a subscriber data-processing system for providing a subscriber with access to said communication system;

a digital subscriber line (DSL) modem for modulating and demodulating data for transmission over a local loop telephone line to a DSL multiplexer (DSLAM);

an asynchronous transfer mode (ATM) edge device in communication with said DSLAM for receiving data from and transmitting data over an ATM network;

a proxy signaling server in communication with said subscriber data processing system;

a content-provider data processing system in communication with said ATM network for providing broadband content to a subscriber;

a client-side application on said subscriber data processing system for use by said subscriber:

to login to said proxy signaling server,

to receive service advertising information due to said login,

to request a bandwidth-on-demand session after said receive, and

for transmitting information to said proxy signaling server in response to said request; and

a connection-management application on said proxy signaling server for:

providing service advertising information to said client-side application due to said login, and

receiving said information and for signaling to said ATM edge device on behalf of said CPE to establish one or more switched virtual circuits (SVCs) from said CPE to said content-provider data processing system.

- 11. (original) The system of claim 10 wherein said digital subscriber line (DSL) modem is supports bridge mode.
- 12. (original) The system of claim 11 wherein said proxy signaling server uses User Network Interface (UNI) signaling to signal said ATM switch on behalf of said CPE.
- 13. (original) The system of claim 12 wherein said client-side application comprises a web browser plug-in.
- 14. (original) The system of claim 12 wherein said client-side application comprises a dialer application.
- 15. (original) The system of claim 12 wherein said ATM edge device comprises an ATM switch.
 - 16. (previously presented) A communications system, comprising:

a subscriber data processing system for use by a subscriber to transmit and receive data to and from a remote content-provider data processing system;

client premise equipment (CPE) in communication with said subscriber data processing system for transmitting and receiving said data over a local loop to a DSL multiplexer (DSLAM);

an asynchronous transfer mode (ATM) edge device in communication with said DSLAM for transmitting and receiving said information over an ATM network;

a proxy signaling server in communication with said subscriber data processing system and said ATM edge device;

means in said subscriber data processing system, responsive to said subscriber, for sending a request to said proxy signaling sever to login to said proxy signaling server, to receive service advertising information from said proxy signaling server due to said login, initiate a bandwidth-on-demand session after said receive, terminate an said bandwidth-on-demand session, and logoff from said proxy signaling server after said termination; and

means in said proxy signaling server, responsive to said requests, wherein said initiating said bandwidth-on-demand session creates one or more Switched Virtual Circuits (SVCs) between said subscriber data processing system and said content-provider data processing system.

17. (previously presented) The method of claim 1, further comprising:

logging onto to a proxy signaling server via a subscriber of said subscriber data processing system; and

providing service advertising information to said subscriber from the proxy signaling server in response to a successful login,

wherein initiating said bandwidth-on-demand session is after said providing of said service advertising information.

18. (previously presented) The method of claim 17, further comprising updating a route table of said subscriber data processing system via the proxy signaling server in response to said creation of said one or more SVCs and in order to route traffic over the newly created said one or more SVCs..

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19. (previously presented) The method of claim 1, wherein said ending of said bandwidth-on-demand session is by said subscriber.

- 20. (previously presented) The system of claim 10, wherein said login includes a message comprising a password and customer identifier.
- 21. (previously presented) The system of claim 10, wherein a termination of said created one or more SVCs is initiated via said client-side application.
- 22. (previously presented) The system of claim 21, wherein a logoff from said proxy signaling server via said client-side application occurs after said termination of one or more SVCs.

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X. Evidence Appendix

None

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XI. Related Procedings Appendix

None